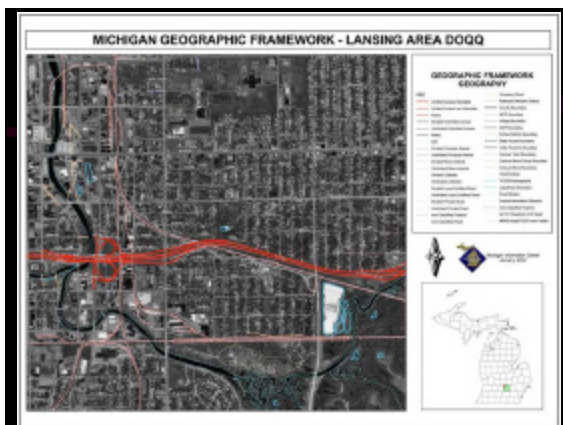


Michigan Geographic Framework Interagency GIS

Eric Swanson, Director
Michigan Center for Geographic Information
Transportation Summit Planning Session
August 4, 2003

Michigan Geographic Framework What is it?

- Michigan's statewide digital GIS base map
- Contains most commonly needed themes
- Designed to be a springboard to applications
- Program is designed to keep map current
- Program is designed to keep associated data current
- Centralized IT Spatial Integration



Michigan Geographic Framework Where did it come from?

- Early 1990's 3 statewide base maps
- MDNR
 - MIRIS
- MDOT
 - Bureau of Planning
 - GIS Mapping on a version of MIRIS
- MDMB
 - Michigan Information Center
 - Updated TIGER/Line File (with new roads/addresses)

Michigan Geographic Framework - Who's involved?

- Michigan state agencies: DMB, DNR, MDOT, DEQ, MSP, Agriculture, DOS, FIA
 - \$15 million investment
- Regions: SEMCOG, Tri-County
- County GIS Departments
- County Road Commissions
- Cities/Townships
- U.S. Census Bureau, USGS, Michigan Tech/RoadSoft

Michigan Geographic Framework 1996 - 1998

- Conflation of TIGER to MIRIS
- CGI partnered with Southeast Michigan Council of Governments to finish 7 counties in Detroit Metro Region

Michigan Geographic Framework 1998 - 2001

- Reconciliation of existing non-GIS Linear (MALI) Referencing System to GIS
 - Corrections made to MALI LRS and GIS
 - Complete LRS for all roads in the state

Michigan Geographic Framework 2000 - 2001

- County boundary reconciliation
- Jurisdictional boundaries statewide
- Integration of additional transportation attributes (bridge id, NFC, ownership, etc)
- Census 2000 polygons
- Re-positioning the MGF
- New measurements at all PR intersections

Michigan Geographic Framework 2002-Present

- Integration with the Transp. Mgmt. System
- Integration of Sufficiency Control Sections
- HPMS integration
- Hydrographic linear referencing system (EPA river reach) pilot
- Rail linear referencing
- Other systems (pipeline, trail, etc.)
 - National Pipeline State Repository
- Act 51 Reconciliation

[illegible][illegible]

Act 51/Framework Reconciliation Map

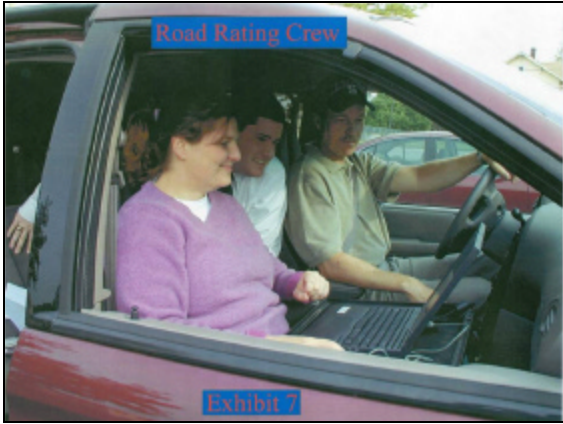
Certified Mileage
July 1, 2002 to June 30, 2003

| | | |
|----------------------------|--------------|--------------|
| MAJOR STREET SYSTEM | <u>6.56</u> | <u>MILES</u> |
| LOCAL STREET SYSTEM | <u>12.06</u> | <u>MILES</u> |

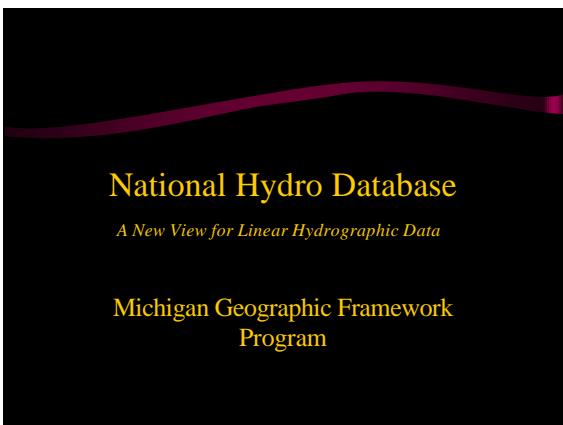
LENGTHS MEASURED FROM THE MICHIGAN GEOGRAPHIC FRAMEWORK (MGF)

| | | |
|----------------------------|--------------|--------------|
| MAJOR STREET SYSTEM | <u>6.80</u> | <u>MILES</u> |
| LOCAL STREET SYSTEM | <u>12.23</u> | <u>MILES</u> |

ACT 51 CERTIFIED LENGTH AND TOTAL LENGTH DERIVED FROM MGF MAY NOT BE THE SAME. (SEE SECTION IV, INSTRUCTIONS AND FORMS FOR PREPARING THE "ANNUAL ROAD MILEAGE CERTIFICATION FOR CITIES AND VILLAGES")







Example of USGS Quadangle with Drain, Assessment District, Parcels and Modeled Heavy Precipitation Directional Overland Flow Patterns and "Micro Watersheds" - and 2 Foot Contours





Statewide Rail Mapping Initiative

Michigan Geographic Framework Program



The Michigan Geographic Framework Network

Partnerships to Keep the Map Current

Michigan Geographic Framework Program



The Michigan Geographic Framework Network

Partnerships to Keep the Map Current

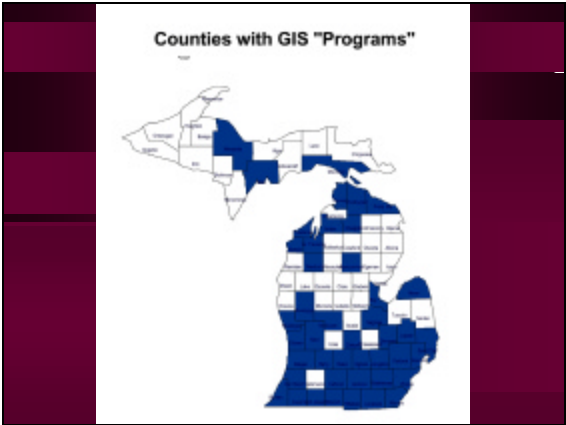
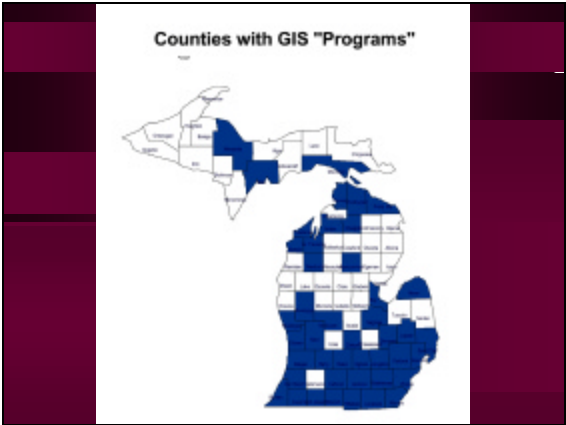
Michigan Geographic Framework Program



The Michigan Geographic Framework Network

Partnerships to Keep the Map Current

Michigan Geographic Framework Program



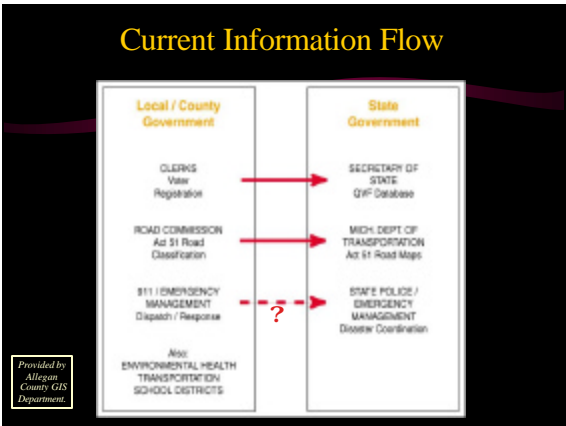
Current Information Flow

The diagram illustrates the flow of information between Local/County Government and State Government. It is divided into two main columns. The left column, titled 'Local / County Government', lists three entities: 'CLERKS / Voter Registration', 'ROAD COMMISSION / Act 51 Road Classification', and '\$111 / EMERGENCY MANAGEMENT / Dispatch / Response'. The right column, titled 'State Government', lists three entities: 'SECRETARY OF STATE / QIF Database', 'HIGH DEPT. OF TRANSPORTATION / Act 51 Road Maps', and 'STATE POLICE / EMERGENCY MANAGEMENT / Disaster Coordination'. Arrows indicate the direction of information flow: a solid red arrow from CLERKS to SECRETARY OF STATE, a solid red arrow from ROAD COMMISSION to HIGH DEPT. OF TRANSPORTATION, and a dashed red arrow from \$111 / EMERGENCY MANAGEMENT to STATE POLICE. A red question mark is placed below the dashed arrow. Below the \$111 / EMERGENCY MANAGEMENT entry, the text 'Also: ENVIRONMENTAL HEALTH TRANSPORTATION / SCHOOL DISTRICTS' is listed.

| Local / County Government | State Government |
|--|---|
| CLERKS / Voter Registration | SECRETARY OF STATE / QIF Database |
| ROAD COMMISSION / Act 51 Road Classification | HIGH DEPT. OF TRANSPORTATION / Act 51 Road Maps |
| \$111 / EMERGENCY MANAGEMENT / Dispatch / Response | STATE POLICE / EMERGENCY MANAGEMENT / Disaster Coordination |

Also:
ENVIRONMENTAL HEALTH
TRANSPORTATION /
SCHOOL DISTRICTS

Provided by:
Allegan
County GIS
Department



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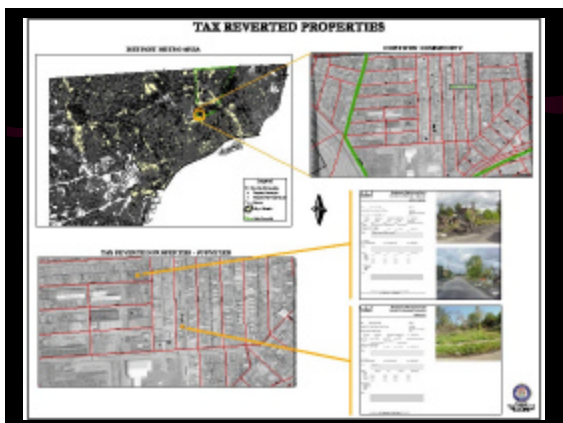
Provided by:
Allegan
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Department

Future Life-Cycle of Road Information for Allegan County



Other Strategic Initiatives

Michigan Geographic Framework Program





Questions/Comments ?
